Commissioner Comments on Draft Final Report *Editorial changes* 

Suggest that when report goes to final format use of graphics, different font sizes, other visual emphases should be used to better delineate key sections of report. Right now, some of these changes can be a little harder to distinguish. (Lipford)

Global warming vs. Climate Change vs. Global Climate Change: The report needs to settle on one term and use it consistently. Perhaps some language in the introduction should note this. I would recommend Climate Change except if the context truly requires some other term. (Freudberg)

Page 2: broke into four workgroups (Lipford)

Page 3, last paragraph. Clarify what is the baseline year. (Freudberg)

Page 3: The final list of recommendations, as adopted by the full Commission, is provided in section III of this report. The list of recommendations is divided into two groups. The first group consists of those recommendations: those that affect greenhouse gas (GHG) emission reductions. This first group of recommendations thus addresses directly the Commission's fourth charge as outlined in Executive Order 59: Identify the actions (beyond those identified in the Energy Plan) that need to be taken to achieve the 30% reduction goal. After the first group of recommendations, the report provides estimates of the GHG reductions that will result from certain recommendations, as well as a discussion regarding the cost effectiveness of such recommendations. The second group includes recommendations that will guide Virginia's response to climate change, including how the state should plan for and adapt to changes that are likely unavoidable. Thus, this second group addresses directly the Commission's third charge as outlined in Executive Order 59: Identify what Virginia needs to do to prepare for the likely consequences of climate change. , and those that will otherwise guide Virginia's response to climate change. Lastly, Some recommendations were heavily debated by the Commission; those issues are described in section IV A of this report.

The time and energy put into the Commission's work has been considerable. Every effort was made to meet the Commission's charge as set forth in EO 59. The Commission's findings are clear. The And the Commission's recommendations themselves are numerous, some being general and flexible where necessary and others being much more specific, where necessary. (Lipford)

Page 4: the Virginia Beach-Norfolk Metropolitan Statistical Area-is the 10<sup>th</sup> largest coastal city in the world in terms of assets ranks 10<sup>th</sup> in the world in value of assets exposed to increased flooding from sea level rise. (Stiles)

Page 7, line 11- has yet to be determined rather that is yet..... (Mann)

- Pg 7. Bullet 4 Last sentence, add "million" before BTUs. 4 places (Murray)
- Page 10: Spell out Northeast Regional Greenhouse Gas Initiative (Lipford)
- Page 11: after <u>successful</u> testing in pilots (Carson)
- Page 12: recommendation 2A should be changed to read: "Achieves at least a 25% reduction in greenhouse gases by 2020 and an 80% reduction below 1990 levels by 2050. (This would make it consistent with pages 29 and 30.) (Bouchard)
- Page 12: Spell out DMME. (Lipford)
- Page 18, Rec 6C: clarify that this applies only to the generation portion of the rate (Carson)
- Page 20: Add a reference in 8C to 14D (Lipford)
- Page 21 (top): remove URL. (Stiles)
- Page 23: explain what "federally mandated actions" means and clarify that EO 59 goal will be met. (Lipford)
- Page 23, end of partial paragraph at the top, add: Also, efforts to conserve land so as to protect existing carbon sinks in forests, farmlands, and wetlands helps advance the Commonwealth's longstanding land conservation goals to preserve habitat, support key industries, and provide clean water. (Lipford)
- Page 25, 1st paragraph: Some measures Virginia may implement to mitigate climate change may reduce <u>required investments and costs in other areas.</u> For example, actions that result in compact development can result in lower costs <u>for to provide</u> utilities (Lipford)
- Page 25, 4<sup>th</sup> paragraph: use the word "method" rather than "methodology." (Mann)
- Page 27, 4<sup>th</sup> paragraph: once a national GHG cap-and-trade program has been established, the <u>associated carbon</u> market will <u>largely</u> determine which measures are most cost effective and these will <u>generally</u> be implemented first. (Lipford)
- Page 31: Rename heading. C. Recommendations that address steps Virginia should take to plan for and adapt to climate change impacts that are likely unavoidable, including direct adaptive responses, required research, and increased capacity and coordination within state and local government. Additional Recommendations Regarding Virginia's Response to Climate Change (Lipford)
- Page 31: 14B. "develop" rather than "identify"

- Page 33: 14N. -The General Assembly should provide funding for the Virginia Geographic Information Network to acquire and process LiDAR data <u>for the entire state</u>. <u>first LiDar data should be first acquired</u> for the coastal zone, which will cost approximately \$6 million, and then <u>for the rest of the state.statewide</u>, <u>and Tthe resulting data should be made available to all public agencies</u>. (Fledderman)
- Page 40: 1<sup>st</sup> paragraph under CAFÉ vs. CALEV has been granted by EPA (Lipford)
- Page 41: Virginia DEQ has estimated that adoption of CALEV in Virginia would result in a <u>cumulative</u> GHG reduction of <u>45 17 MMT</u> beyond the reduction that will be achieved by federal CAFÉ standards in-by 2020. (Staff clarification from DEQ.)
- Page 52: Electric utilities traditionally offer residential and small commercial rates that include a fixed monthly charge and a block rate that may vary as use increases. The fixed charge is to cover basic costs of service that remain the same regardless of use. The variable usage rates are cost-based and are designed to recover remaining fixed costs as well as variable costs that change with use. (Carson)
- Page 56: The workgroup recommended that, at a minimum, Virginia should plan for a 3.6 °F increase in air and water temperatures, and at least a 2.3 foot rise <u>in sea level</u>. (Bouchard)
- Page 58, bottom: While the workgroup recognized that <u>it is impossible to predict the</u> exact nature and extent of all future impacts, there is enough evidence of changes already occurring and commonly accepted predictions of likely future impacts, that the time to start planning for impacts is now. all of the impacts that climate change will have may not be fully understood, it also recognized the urgency to act on those that are understood.
- Pg 63. Students also made "conservation" suggestions that would have an immediate positive impact on GHG
- 1. Eliminate the use of plastic bottles for water
- 2. Buy reusable bags to eliminate the use of plastic and paper shopping bags.
- 3. Proper inflation of tires and carpooling to reduce fuel consumption (Murray)